Applicant: Khalaf et al.

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Attorney's Docket No.: 17856-002US1

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-49. Canceled

- 50. (New) An oligopeptide compound comprising:
- (a) at least one nitrogen-containing basic group attached to at least one end of the oligopeptide; and
- (b) two or more heterocyclic monomers, at least one of which is substituted in the heterocyclic part by a branched, cyclic or part cyclic C₃₋₅ alkyl group, or a pharmaceutically acceptable salt or solvate thereof;

which compound, salt or solvate binds to the minor groove of DNA.

- 51. (New) An oligopeptide compound as claimed in Claim 50 comprising:
- (a) at least one nitrogen-containing basic group attached to at least one end of the oligopeptide; and
- (b) two or more heterocyclic monomers, at least one of which is substituted on a ring Catom in the heterocyclic part by a branched, cyclic or part cyclic C₃₋₅ alkyl group, or a pharmaceutically acceptable salt or solvate thereof; which compound, salt or solvate binds to the minor groove of DNA.
- 52. (New) A compound as claimed in Claim 50, wherein the nitrogen-containing basic group, in its neutral state, has a pK_a in water of at least 4.

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53. (New) A compound as claimed in Claim 52, wherein the nitrogen-containing basic group is an amidino, guanidino or amino group, any of which may be cyclic or acyclic.

- 54. (New) A compound as claimed in Claim 50, wherein each heterocyclic group is a 4- to 12-membered heterocyclic group containing one or more heteroatoms selected from N, O and S.
- 55. (New) A compound as claimed in Claim 54, wherein each heterocyclic group is independently aromatic or part-aromatic.
- 56. (New) A compound as claimed in Claim 55, wherein each heterocyclic group that is present is independently selected from the group consisting of pyrrolyl, imidazolyl, thiazolyl, oxazolyl, benzoxazolyl, furanyl, thienyl, pyridyl and coumarinyl.
- 57. (New) A compound as claimed in Claim 56, wherein at least one heterocyclic group that is present is a thiazolyl group.
- 58. (New) A compound as claimed in Claim 57, wherein the thiazolyl group is a 1,3-thiazolyl group that is substituted in the 5-position by, as appropriate, the branched, cyclic or part cyclic C_{3-5} alkyl group.
- 59. (New) A compound as claimed in Claim 50, wherein the branched, cyclic or part cyclic $C_{3.5}$ alkyl group is isopropyl.
- **6**0. (New) A compound as claimed in Claim 50, which has a molecular weight of below 2000 g mol⁻¹.
 - 61. (New) A compound as claimed in Claim 50, which is bioavailable.

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62. (New) A compound as claimed in Claim 50, which has a high affinity for DNA sequences.

- 63. (New) A compound as claimed in Claim 61 that binds to the minor groove of a DNA oligomer or polymer with a dissociation constant of less than 10⁻⁵ M.
- 64. (New) A compound as claimed in Claim 50, wherein each essential branched, cyclic or part cyclic C_{3-5} alkyl substituent on a heterocyclic monomer is other than cyclopropyl.

65. (New) A compound of formula I,

$$R^1$$
 A^D

wherein

R¹ represents Het¹, R^{1a}C(O)- or D-A-N(H)-[Q]_n-C(O)-E-C(O)-;

R^{1a} represents H,

aryl (which latter group is optionally substituted by one or more substituents selected from OH, halo, cyano, nitro, $N(R^{3a})R^{3b}$, C_{1-4} alkyl and C_{1-4} alkoxy),

aromatic or part-aromatic C_{13-14} tricyclic carbocyclyl (which latter group is optionally substituted by one or more substituents selected from OH, halo, cyano, nitro, $N(R^{3a})R^{3b}$, C_{1-4} alkyl and C_{1-4} alkoxy, and which latter group, if part-aromatic, is optionally substituted in the non-aromatic part by one or two oxo groups) or

 C_{1-12} alkyl (which latter group is optionally substituted and/or terminated by one or more substituents selected from halo and aryl (which latter group is optionally substituted by one or more substituents selected from OH, halo, cyano, nitro, $N(R^{3a})R^{3b}$, C_{1-4} alkyl and C_{1-4} alkoxy));

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A represents, at each occurrence when used herein, C_{2-6} alkylene or A^1 -C(O)N(H)- A^2 , wherein A^2 is attached to the group D;

A¹ represents C₁₋₄ alkylene;

A² represents C₂₋₅ alkylene;

D represents, at each occurrence when used herein, $-N(R^{2a})R^{2b}$, $-C(=NR^{2c})N(R^{2d})R^{2e}$ or $-N(R^{2f})C(=NR^{2g})N(H)R^{2h}$;

 R^{2a} and R^{2b} independently represent H, C_{1-6} alkyl, Het^2 or R^{2a} and R^{2b} together represent $(CH_2)_{3-6}$, which alkylene group is optionally interrupted by NR^4 and/or is optionally substituted by one or more C_{1-4} alkyl groups;

R⁴ represents H, C₁₋₆ alkyl or Het³;

 R^{2c} to R^{2h} independently represent H or C_{1-6} alkyl;

E represents $-E^1$ -Het⁴-, E^{2a} , $-(CH_2)_{0-3}N(H)C(O)-E^{2b}-C(O)N(H)(CH_2)_{0-3}$ - or a structural fragment of the formula

wherein E^3 represents $(CH_2)_{1-2}$, CH=CH, CH=N, $CH_2-N(R^a)$, $(CH_2)_{0-1}C(O)$, $(CH_2)_{0-1}O$ or $(CH_2)_{0-1}S$;

R^a represents H or C₁₋₆ alkyl;

 E^{1} represents $(CH_{2})_{0-2}$ or CH=CH;

 E^{2a} and E^{2b} independently represent C_{2-4} alkenylene, C_{3-6} cycloalkylene, phenylene or naphthylene;

Het¹ to Het⁴ independently represent four- to twelve-membered heterocyclic groups containing one or more heteroatoms selected from N, O and S, which heterocyclic groups are optionally substituted by one or more substituents selected from =O, OH, halo, cyano, nitro, $N(R^{3a})R^{3b}$, C_{1-4} alkyl and C_{1-4} alkoxy;

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 R^{3a} and R^{3b} independently represent, at each occurrence when used herein, H or C_{1-4} alkyl, or R^{3a} represents -C(O) R^5 ;

R⁵ represents H or C₁₋₄ alkyl;

n represents, at each occurrence when used herein, 2, 3, 4 or 5;

each individual Q independently represents a structural fragment of formula Ia, Ib, Ic, Id, Ie or If

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$$(CH_2)_q \qquad (CH_2)_r \qquad (CH_2)_r \qquad S$$

$$R^{10} \qquad If$$

wherein

R⁶ represents H or C₁₋₆ alkyl;

 R^7 represents C_{1-12} alkyl;

 R^8 , R^9 , R^{10} and R^{11} independently represent H or C_{1-12} alkyl;

G represents CH or N;

L represents O or S;

p, q and r independently represent 0, 1, 2 or 3; and

provided that the compound comprises at least one structural fragment of formula Ib, Ic, Id, le or If in which R^6 or R^7 , R^8 , R^9 , R^{10} or R^{11} , respectively, represents branched, cyclic or part cyclic C_{3-5} alkyl;

or a pharmaceutically acceptable derivative thereof.

66. (New) A compound as claimed in Claim 65, wherein:

 R^{1a} represents H or C_{1-12} alkyl, which latter group is optionally substituted and/or terminated by one or more substituents selected from halo and aryl, which latter group is optionally substituted by one or more substituents selected from OH, halo, cyano, nitro, $N(R^{3a})R^{3b}$, C_{1-4} alkyl and C_{1-4} alkoxy; and

the compound comprises at least one structural fragment of formula Ib, Ic, Id, Ie or If in which R^7 , R^8 , R^9 , R^{10} or R^{11} , respectively, represents branched, cyclic or part cyclic C_{3-5} alkyl.

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67. (New) A compound as claimed in Claim 65, wherein aryl is phenyl or naphthyl.

68. (New) A compound as claimed in Claim 65, wherein alkyl and alkoxy groups are, where appropriate:

- (a) straight-chain;
- (b) branched-chain and/or cyclic; or
- (c) part cyclic/acyclic.

69. (New) A compound as claimed in Claim 65, wherein alkyl and alkoxy groups are, where appropriate:

- (a) saturated or unsaturated;
- (b) interrupted by one or more oxygen and/or sulfur atoms; and/or
- (c) unless otherwise specified, substituted by one or more halo atoms.

70. (New) A compound as claimed in Claim 65, which is a compound of formula II,

$$R^{1}$$
— Q^{1} — Q^{2} — Q^{3} — N
 A
 N
 R^{2a}

wherein

 R^1 represents Het^1 , $R^{1a}C(O)$ - or D-A-N(H)- Q^3 - Q^2 - Q^1 -C(O)-E-C(O)-;

Q¹ is absent or represents a structural fragment of formula Ia, Ib, Ic, Id, Ie or If;

Q² represents a structural fragment of formula Ib, Ie or If;

Q³ represents a structural fragment of formula Ib, Id, Ie or If; and

Het¹, R^{1a}, D, A, E, R^{2a}, R^{2b}, A and the structural fragments of formulae Ia, Ib, Ic, Id, Ie and If are as defined in any one of Claims 16 to 20;

provided that:

(a) at least one of Q^1 , Q^2 and Q^3 represents a structural fragment of formula Id, Ie or If; and

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(b) at least one of R^6 or R^7 , R^8 , R^9 , R^{10} and R^{11} (whichever is/are present) represents branched, cyclic or part cyclic C_{3-5} alkyl,

or a pharmaceutically acceptable derivative thereof.

71. (New) A compound as claimed in Claim 65, wherein the compound comprises:

- (a) at least one structural fragment of formula Ib in which G represents N and R⁶ represents branched, cyclic or part cyclic C₃₋₅ alkyl;
- (b) at least one structural fragment of formula Id in which p represents 0 and R⁹ represents branched, cyclic or part cyclic C₃₋₅ alkyl; and/or
- (c) at least one structural fragment of formula Ie in which q represents 0 and R^{10} represents branched, cyclic or part cyclic C_{3-5} alkyl.
- 72. (New) A compound as claimed in Claim 65, wherein each of the at least one branched, cyclic or part cyclic C_{3-5} alkyl groups independently represents isopropyl, cyclopropylmethyl, isopentyl or cyclopentyl.
- 73. (New) A compound as claimed in Claim 65, wherein the compound comprises at least one structural fragment of formula Ib, Ic, Id, Ie or If in which R⁷, R⁸, R⁹, R¹⁰ or R¹¹, respectively, represents isopropyl.
- 74. (New) A compound as claimed in Claim 65, which compound comprises at least one structural fragment of the formula

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75. (New) A compound as claimed in Claim 65, which compound is selected from the following:

- (i) *N*-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1*H*-pyrrol-3-yl]amino}carbonyl)-1-isopropyl-1-*H*-pyrrol-3-yl]-4-[(3,3-dimethylbutanoyl)amino]-1-methyl-1*H*-pyrrole-2-carboxamide;
- (ii) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl}-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopropyl-1H-pyrrol-3-yl]-4-(formylamino)-1-methyl-1H-pyrrole-2-carboxamide;
- (iii) *N*-[3-(Dimethylamino)propyl]-2-({[4-({[4-(formylamino)-1-methyl-1*H*-pyrrol-2-yl]carbonyl}-amino)-1-methyl-1*H*-pyrrol-2-yl]carbonyl}-amino)-5-isopropyl-1,3-thiazole-4-carboxamide;
- (iv) N-[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-isopropyl-1H-pyrrol-3-yl]-4-({[4-(formylamino)-1-isopropyl-1H-pyrrol-2-yl]carbonyl}-amino)-1-isopropyl-1H-pyrrole-2-carboxamide
- (v) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-4-(formyl-amino)-1-isopentyl-1H-pyrrole-2-carboxamide;
- (vi) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-isopropyl-1H-pyrrol-3-yl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]-4-(formyl-amino)-1-isopropyl-1H-pyrrole-2-carboxamide;
- (vii) *N*-[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1*H*-pyrrol-3-yl]-2-({[4-(formylamino)-1-methyl-1*H*-pyrrol-2-yl]carbonyl}-amino)-5-isopropyl-1,3-thiazole-4-carboxamide;
- (viii) $4-(\{[4-(Formylamino)-1-methyl-1H-pyrrol-2-yl]carbonyl\}amino)-1-iso-propyl-N-[1-methyl-5-(\{[3-(4-morpholinyl)propyl]amino\}carbonyl)-1H-pyrrol-3-yl]-1H-pyrrole-2-carboxamide;$

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(ix) 4-(Formylamino)-N-[1-isopropyl-5-({[1-methyl-5-({[3-(1-pyrrolidinyl)-propyl]amino}carbonyl)-1H-pyrrol-3-yl]amino}carbonyl)-1H-pyrrol-3-yl]-1-methyl-1H-pyrrole-2-carboxamide;

- (x) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-4-(formylamino)-1-methyl-1H-pyrrole-2-carboxamide;
- (xi) 2-(Acetylamino)-*N*-[5-({[5-({[3-(dimethylamino)propyl]amino}-carbonyl)-1-methyl-1*H*-pyrrol-3-yl]-5-isopropyl-1,3-thiazole-4-carboxamide;
- (xii) 2-(Acetylamino)-*N*-[5-({[4-({[3-(dimethylamino)propyl]amino}-carbonyl)-5-isopropyl-1,3-thiazol-2-yl]amino}carbonyl)-1-methyl-1*H*-pyrrol-3-yl]-5-isopropyl-1,3-thiazole-4-carboxamide;
- (xiii) 2-(Acetylamino)-*N*-(5-{[(3-{[3-(dimethylamino)propyl]amino}-3-oxo-propyl)amino]carbonyl}-1-methyl-1*H*-pyrrol-3-yl)-5-isopropyl-1,3-thiazole-4-carboxamide;
- (xiv) N^1 , N^3 -Bis(2-{[5-({[4-({[3-(dimethylamino)propyl]amino}carbonyl)-5-isopropyl-1,3-thiazol-2-yl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]-amino}-2-oxoethyl)isophthalamide;
- (xv) *N*-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1*H*-pyrrol-3-yl]amino}carbonyl)-1-isopropyl-1*H*-pyrrol-3-yl]-4-(acetylamino)-1-methyl-1*H*-pyrrole-2-carboxamide;
- (xvi) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-4-(acetyl-amino)-1-methyl-1H-pyrrole-2-carboxamide;
- (xvii) N^2 , N^5 -Bis[5-({[4-({[3-(dimethylamino)propyl]amino}carbonyl)-5-isopropyl-1,3-thiazol-2-yl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]-1H-indole-2,5-dicarboxamide;
- (xviii) N^2 , N^5 -Bis[1-isopentyl-5-({[1-methyl-5-({[3-(4-morpholinyl)propyl]-amino}carbonyl)-1H-pyrrol-3-yl]amino}carbonyl)-1H-pyrrol-3-yl]-1H-indole-2,5-dicarboxamide;

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(xix) N^2 , N^5 -Bis[5-({[5-({[3-(dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-1H-indole-2,5-dicarboxamide;

 $(xx) N^2, N^5$ -Bis[1-isopentyl-5-({[1-methyl-5-({[3-(4-methyl-1-piperazinyl)-propyl]amino}carbonyl)-1*H*-pyrrol-3-yl]amino}carbonyl)-1*H*-pyrrol-3-yl]-1*H*-indole-2,5-dicarboxamide;

(xxi) 2-({[4-({[4-(Acetylamino)-1-methyl-1*H*-imidazol-2-yl]carbonyl}-amino)-1-methyl-1*H*-pyrrol-2-yl]carbonyl}amino)-*N*-[3-(dimethylamino)-propyl]-5-isopropyl-1,3-thiazole-4-carboxamide;

(xxii) 4-(Acetylamino)-*N*-[1-isopentyl-5-({[1-methyl-5-({[3-(4-methyl-1-piperazinyl) propyl]amino}carbonyl)-1*H*-pyrrol-3-yl]amino}carbonyl)-1*H*-pyrrol-3-yl]-1-methyl-1*H*-pyrrole-2-carboxamide;

(xxiii) *N*-[1-Isopentyl-5-({[1-methyl-5-({[3-(4-methyl-1-piperazinyl)-propyl]amino}carbonyl)-1*H*-pyrrol-3-yl]amino}carbonyl)-1*H*-pyrrol-3-yl]-4-[(3-methoxybenzoyl)amino]-1-methyl-1*H*-pyrrole-2-carboxamide;

(xxiv) N-[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]-4-({[5-(formylamino)-2-methyl-3-thienyl]carbonyl}amino)-1-isopentyl-1H-pyrrole-2-carboxamide;

 $(xxv) N-[5-(\{[5-(\{[3-(dimethylamino)propyl]amino\}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino\}carbonyl)-1-methyl-1H-pyrrol-3-yl]-5-isopropyl-2-[(3-methoxybenzoyl)amino]-1,3-thiazole-4-carboxamide;$

 $(xxvi) \ \textit{N-}[5-(\{[3-(Dimethylamino)propyl]amino} carbonyl)-1-methyl-1\textit{H-pyrrol-}3-yl]-4-\\ \{[(5-\{[(9,10-dioxo-9,10-dihydro-2-anthracenyl)carbonyl]-amino}-2-methyl-3-\\ thienyl)carbonyl]amino}-1-isopentyl-1\textit{H-pyrrole-}2-carboxamide;$

(xxvii) N-[1-(Cyclopropylmethyl)-5-({[5-({[3-(dimethylamino)propyl]-amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1H-pyrrol-3-yl]-4-(formylamino)-1-methyl-1H-pyrrole-2-carboxamide;

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(xxviii) 1-Cyclopentyl-N-[5-({[3-(dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]-4-({[4-(formylamino)-1-methyl-1H-pyrrol-2-yl]-carbonyl}-amino)-1H-pyrrole-2-carboxamide;

 $(xxix) N^2, N^7$ -Bis[5-({[4-({[3-(dimethylamino)propyl]amino}carbonyl)-5-isopropyl-1,3-thiazol-2-yl]amino}carbonyl)-1-methyl-1*H*-pyrrol-3-yl]-9,10-dihydro-2,7-phenanthrenedicarboxamide;

(xxx) 4-(Formylamino)-*N*-[1-isopentyl-5-({[1-methyl-5-({[3-(4-methyl-1-piperazinyl)propyl]amino}carbonyl)-1*H*-pyrrol-3-yl]amino}carbonyl)-1*H*-pyrrol-3-yl]-1-methyl-1*H*-pyrrole-2-carboxamide;

(xxxi) 4-(Acetylamino)-*N*-[1-isopentyl-5-({[1-methyl-5-({[3-(4-morpholinyl)propyl]amino}carbonyl)-1*H*-pyrrol-3-yl]amino}carbonyl)-1*H*-pyrrol-3-yl]-1-methyl-1*H*-pyrrole-2-carboxamide;

 $(xxxii) \ 4-(Formylamino)-N-[1-isopentyl-5-(\{[1-methyl-5-(\{[3-(4-morpholinyl)propyl]amino\}carbonyl)-1$H-pyrrol-3-yl]amino} carbonyl)-1$H-pyrrol-3-yl]-1-methyl-1$H-pyrrole-2-carboxamide;$

(xxxiii) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-4-[(3-methoxybenzoyl)amino]-1-methyl-1H-pyrrole-2-carboxamide; and

(xxxiv) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl}-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-4-{[(4-methoxyphenyl)acetyl] amino}-1-methyl-1H-pyrrole-2-carboxamide.

76. (New) A compound as claimed in Claim 75 which is:

(a) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopropyl-1H-pyrrol-3-yl]-4-(formylamino)-1-methyl-1H-pyrrole-2-carboxamide;

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(b) *N*-[3-(Dimethylamino)propyl]-2-({[4-({[4-({formylamino}-1-methyl-1*H*-pyrrol-2-yl]carbonyl}-amino)-1-methyl-1*H*-pyrrol-2-yl]carbonyl}-amino)-5-isopropyl-1,3-thiazole-4-carboxamide;

- (c) *N*-[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1*H*-pyrrol-3-yl]-2-({[4-(formylamino)-1-methyl-1*H*-pyrrol-2-yl]carbonyl}-amino)-5-isopropyl-1,3-thiazole-4-carboxamide;
- (d) N-[5-({[5-({[3-(Dimethylamino)propyl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1-isopentyl-1H-pyrrol-3-yl]-4-(formylamino)-1-methyl-1H-pyrrole-2-carboxamide;
- (e) N^2 , N^5 -Bis[1-isopentyl-5-({[1-methyl-5-({[3-(4-morpholinyl)propyl]-amino}carbonyl)-1H-pyrrol-3-yl]amino}carbonyl)-1H-pyrrol-3-yl]-1H-indole-2,5-dicarboxamide;
- (f) N-[1-(Cyclopropylmethyl)-5-({[5-({[3-(dimethylamino)propyl]-amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]amino}carbonyl)-1H-pyrrol-3-yl]-4-(formylamino)-1-methyl-1H-pyrrole-2-carboxamide; or
- (g) N^2 , N^7 -Bis[5-({[4-({[3-(dimethylamino)propyl]amino}carbonyl)-5-isopropyl-1,3-thiazol-2-yl]amino}carbonyl)-1-methyl-1H-pyrrol-3-yl]-9,10-dihydro-2,7-phenanthrenedicarboxamide.
- 77. (New) A compound as claimed in Claim 76 which is N-[3-(dimethylamino)-propyl]-2-({[4-({[4-(formylamino)-1-methyl-1H-pyrrol-2-yl]carbonyl}-amino)-1-methyl-1H-pyrrol-2-yl]carbonyl}amino)-5-isopropyl-1,3-thiazole-4-carboxamide.
- 78. (New) A compound as claimed in Claim 50, which binds to and/or has specificity for DNA sequences that contain at least one GC base pairing.
 - 79. (New) A compound as claimed in Claim 78, which is:

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(i) a compound of formula I, as defined in any one of Claims 65 to 69 or 71 to 74, provided that the compound comprises at least one structural fragment of formula Id, Ie or If; or

- (ii) a compound of formula II, as defined in any one of Claims 70 to 74.
- 80. (New) A compound as claimed in Claim 50 which has different binding affinities at different minor groove binding sites in double-stranded DNA molecules having more than one minor groove binding site.
- 81. (New) A compound as claimed in Claim 80, wherein the different minor groove binding sites comprise solely AT base pairs.
- 82. (New) A pharmaceutical formulation including a compound as defined in Claim 50 in admixture with a pharmaceutically-acceptable adjuvant, diluent or carrier.
- 83. (New) A method of treatment of a disease that relies upon DNA replication for its propagation, which method comprises administration of a therapeutically effective amount of a compound as defined in Claim 50 to a person suffering from that disease.
- 84. (New) A method of treating a viral, bacterial, fungal or other microbial (e.g. parasitic) infection, where the viral, bacterial, fungal or other microbial (e.g. parasitic) infective agent is resistant to one or more anti-viral, anti-bacterial, anti-fungal or other anti-microbial (e.g. anti-parasitic) agents, respectively, that do not act by inhibiting DNA replication, which method comprises administration of a therapeutically effective amount of a compound as defined in Claim 50 to a person having that infection.

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85. (New) A method of treatment of a disease that relies upon DNA replication for its propagation, which method comprises administration, to a person suffering from that disease, of a therapeutically effective amount of a compound as defined in Claim 50 in combination with one or more other agents that are known to be effective in treating that disease.

- 86. (New) A combination product comprising components:
- (A) a formulation comprising a compound as defined in Claim 50; and
- (B) a formulation comprising one or more other chemical agents that are known to be effective in treating diseases that rely upon DNA replication for their propagation.
- 87. (New) A combination product as claimed in Claim 86, wherein each of components (A) and (B) is formulated in admixture with a pharmaceutically-acceptable adjuvant, diluent or carrier.
- 88. (New) A combination product as claimed in Claim 86, wherein (A) and (B) are presented as separate components.
- 89. (New) A combination product as claimed in Claim 86, wherein (A) and (B) are presented as a single formulation.
- 90. (New) A method of inhibiting DNA replication, which method comprises contacting the DNA with an inhibitory amount of a compound as defined in Claim 50.
- 91. (New) A method of stabilising a DNA duplex formed between first and second single strands of DNA, which method comprises contacting that DNA duplex with a compound as defined in Claim 50.

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92. (New) A method of enhancing the difference in melting temperatures between first and second DNA duplexes, wherein each DNA duplex is formed from a first single strand of DNA that is the same in each duplex and a second single strand of DNA that is different in each duplex, which method comprises contacting each DNA duplex with a compound as defined in Claim 50.

- 93. (New) A process for the preparation of compounds of formula I as defined in Claim 65 which comprises:
 - (a) reaction of a compound of formula III,

$$H \leftarrow Q \rightarrow A^a \rightarrow D$$

wherein A^a represents A or, when a represents 0, then A^a may also represent A² and Q, D, A and A² are as defined in Claim 16 and a is as defined below, with a compound of formula IV,

$$R^1$$
 Q A^b L^1 IV

wherein A^b represents a direct bond or -A¹-C(O)-, as appropriate, L¹ represents a leaving group, a and b both represent integers from 0 to 5, the sum of the two being 2, 3, 4 or 5, and R¹ and Q are as defined in Claim 65;

(b) for compounds of formula I in which R^1 represents D-A-N(H)-[Q]_n-C(O)-E-C(O)-, reaction of two equivalents of a compound of formula V,

$$H \longrightarrow H \longrightarrow D$$

wherein Q, n, A and D are as defined in Claim 16, with a compound of formula VI,

$$L^2$$
-C(O)-E-C(O)- L^2 VI

wherein L^2 represents a leaving group, the two L^2 groups being the same or different, and E is as defined in Claim 65; or

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(c) deprotection of a protected derivative of a compound of formula I as defined in Claim 65.

A compound of formula V, as defined in Claim 93, or a protected 94. (New) derivative thereof.